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INTERNATIONAL

INDIAN PRESS ON COOPERATION WITH EEC, SATELLITE COMMUNICATION PROJECT

Delhi General Overseas Service in English 1050 GMT 8 Jun 77 BK

[From press review]

[Text] The ECONOMIC TIMES refers to the Indo-EEC commercial cooperation agreement signed about 3 years ago and says that it recognizes the principle of production-cooperation base and the complementarity of the Indian and European economics. Some progress has since been made in the field of engineering goods, leather products and so on. The recent visit to this country of the vice president of the European Commission, Mr Wilhelm (Haperkaumb), has been fruitful in identifying a few other specific fields for cooperation. Prominent here is a proposal that India should export iron ore [?products] ranging from iron ore pellets to pig iron. There is now the prospect of setting up three iron ore pelletization plants with financial assistance from the EEC. These plants will be linked with long-term supplies of pellets to meet the increasing demand by the European steel industry.

The paper continues: The possibility is also being considered for setting up additional blast furnace capacity to produce pig iron in India for export under long-term arrangement with EEC countries. Apart from interindustry cooperation, the steel minister, Mr Biju Patniak, has referred to the potential for undertaking joint ventures between India and the EEC in Third countries. Such ventures based on utilization of sophisticated European technology with the help of India's vast resources of manpower and fabrication capacity will be mutually beneficial.

The ECONOMIC TIMES then welcomed the launching of the satellite telecommunication experiment project as another step in our space program. It says that the experiment, which is a joint effort of the Indian Space Research Organization and the Post and Telegraph Department, will help test the communication system being developed for ultimate use in the Indian satellite Insats, scheduled to be launched after 1980. According to the director of the space [?application] center, Ahmedabad, Professor Yashpal, there are plans to put into orbit by 1980 a small telecommunication satellite designed and fabricated in India. This presumably will be followed by the Insats.

The paper adds: Another feature of this test is that besides the three major earth stations at Ahmedabad, Delhi and Madras, a transportable earth station on a truck will also be used, called the transportable remote area communication terminal, tract. It can be moved by road to any location in India and can operate through any trunk telephone exchange. The tract can also be used for transmitting and receiving television programs from any part of the country.

CSO: 5500

EXPERIMENTAL SATELLITE TELE-LINKS BETWEEN INDIA, FRANCE, FRG

Madras THE HINDU in English 1 Jun 77 p 6

[Text]

NEW DELHI, May 31.

The Satellite Telecommunication Experiment Project (STEP) which marks a major step in the efforts to provide communication links with remote areas through satellite will be launched tomorrow.

An indigenously built Transportable Remote Area Communication Terminal (TRACT) seen in the picture will be moved to Amreli, 300 km. from Ahmedabad. It will be linked to the earth station at Ahmedabad through the Franco-German Symphonie satellite, thus providing a two-voice circuit for manual trunk operation between Amreli and Ahmedabad.

This will mark the beginning of the two-year experiment jointly undertaken by the P and T Department and the Indian Space Research Organisation in collaboration with the space agencies of the Federal Republic of Germany and France which have made available one of their two communications satellites.

EXPERIMENT FOR TWO YEARS

Over the next two years a series of communications experiments will be conducted using hardware developed at the Space Applications Centre of the Indian Space Research Organisation at Ahmedabad, the Telecommunications Research Centre of the P and T at New Delhi and the Indian Telephone Industries, Bangalore.

Symphonie is Europe's first venture in the field of communication satellite technology and in-

corporates some new design features. Two such satellites are already in orbit and some experiments using them have been conducted by European nations, in particular France and Germany.

One of these satellites has been moved to a location of 49°E longitude over the equator and will look towards India. Its beam covers the whole of India including the Andaman-Nicobar Islands. The orbit is synchronous—its altitude over the equator is 36,000 km. and it keeps pace with the rotating earth.

EARTH STATION NEAR MADRAS

There will be three major earth stations for the experiment in addition to two transportable terminals. The earth stations at Delhi and Ahmedabad which were originally set up for the Satellite Instructional Television Experiment (SITE), have been suitably augmented for this new project. A third earth station, being installed near Madras is expected to be ready by August.

TRACT has been built using a standard 7½ tonne truck chassis and is self contained. It can be moved to any location and can operate through any trunk-telephone exchange. Thus it will be possible to set up at short notice experimental telephone links of high reliability and good quality with any of the earth stations.

TRACT is also capable of transmitting television programmes. It can also receive the TV programmes transmitted by the earth

stations. It is manned by a crew of four.

A still smaller terminal which can be lifted by a helicopter has also been made. Known as Emergency Communications Terminal (ECT) it is primarily designed to provide a couple of reliable and good quality telephone channels with any of the remaining stations. This station can be moved on a jeep or air-lifted whenever an emergency occurs. Manned by a crew of three it can be readied for use in about five hours. It is light weight compact, completely self-contained and developed indigenously.

Among the several experiments that are planned in STEP one relates to digital communication. This envisages linking the three earth stations using digital techniques at high speeds such as eight million bits per second. Hardware for this is jointly developed by ISRO and P and T. Another experiment relates to integration of circuits provided by symphonie satellite into the domestic automatic trunk telephone network. These experiments will be very useful for future domestic satellite telecommunications.

Yet another experiment relates to the distribution of radio broadcast programmes. All this will help in the proper planning and implementation of the future domestic national communication system.

INTERNATIONAL

INDIAN DELEGATES TO ATTEND MOSCOW ELECTROTECHNICAL MEETING

Delhi ISI in English 0950 GMT 6 Jun 77 BK

[Text] India will be participating in the 42d annual general meetings of the International Electrotechnical Commission (IEC) to be held in Moscow (USSR) between 6 to 18 June.

Apart from the meeting of the IEC Council and Committee of Action, 30 technical committees of the IEC are expected to meet.

Subjects of particular interest to India which will be discussed at the meetings include insulating materials, safety of household electrical appliances, electrical installations of buildings, switch gear and control gear and standard voltages' current rating and frequencies. India has made significant contribution in many of these fields to reflect requirements of the tropical countries.

During the meetings, several points of significance to India in the areas mentioned above will be focussed upon with a view to taking care of the country's interests in foreign trade.

A five-member Indian delegation comprising J. S. Zaveri, managing director, Bharat Bijlee Limited; V. S. Venkateswar, deputy director general, Indian Standards Institution (ISI); V. A. Krishnamurthy, chief engineer (electrical) CPW [Central Public Works]; D.V.S. Bhatia of Siemens India Limited, and I. C. Joseph of Larsen and Toubro Limited, will be attending the meetings.

The delegation would also attend the World Electrotechnical Congress (WELC) which is being organized in continuation of the IEC annual general meetings. The congress has a programme to thoroughly consider and discuss the outstanding achievements, important tasks and further lines of development of electrical engineering and new scientific and engineering ideas.

CSO: 5500

INTERNATIONAL

BRIEFS

JORDAN BUYING SWITCHBOARDS--Jordan has just ordered five automatic switchboards capable of handling 18,000 to 45,000 calls, at a cost of 30 million dollars, from the Japanese Nissho group now working with Nippon Electric [Company] (NEC). [Text] [Paris L'USINE NOUVELLE in French 2 Jun 77 p 44]

LMT SALE TO EGYPT--The LMT [Telephone Equipment Company] has just obtained an order from Egypt to supply and install two Metaconta electronic switchboards, one in Cairo and the other in Alexandria. These switchboards are of the Centrex type, the first having an initial capacity of 3,000 lines and the second of 1,500 lines. Installation will begin next year and they are expected to be operating by 1979. The contract provides that LMT will provide the technical assistance, for one year, that is needed to train the personnel responsible for the operation and maintenance of these telephone systems. [Text] [Paris ELECTRONIQUE ACTUALITES in French 3 Jun 77 p 8]

INTERNATIONAL TELECOMMUNICATIONS COLLOQUIUM--There will be held in Lannion, France, from 4 to 6 October 1977 an international colloquium devoted to measurements in telecommunications. It is to be organized by the CNFRS [French National Committee on Scientific Radioelectricity] and the SEE [Association of Electric, Electronic, and Radioelectric Specialists] under the aegis of Committee A (electromagnetic metrology) and Committee C (signals and systems) of the IRSU [International Radio Scientific Union]. The purpose of this colloquium is to bring together specialists in measurements and practitioners in telecommunications in order to help secure a synthesized view of the problem of measurement and a better appreciation of current trends in instrumentation in the telecommunications field. [Text] [Paris ELECTRONIQUE ACTUALITES in French May 77 p 7] 2662

OIRT MEETING IN GDR--Suhl (ADN)--The 28th session of the OIRT (Organization Internationale du Radiodiffusion et Television) and the 52d session of the OIRT Administration Council have ended in Suhl. At these sessions, delegates from 18 member organizations discussed among other things the television and radio programs of the member organizations on the occasion of the 60th anniversary of the Great October Socialist Revolution. [Text] [East Berlin NEUES DEUTSCHLAND in German 6 Jun 77 p 2 AU]

COMMUNICATIONS OFFICIAL IN AUSTRIA--Vienna, 8 Jun (TANJUG)--President of the Yugoslav Federal Committee for Traffic and Communications Bozidar Dimitrijevic today ended his two-day visit to Austria. Dimitrijevic visited Austria at the invitation of the Austrian federal minister of transport, Erwin Lanz. On this occasion talks were conducted on further progress in cooperation between the two countries in the area of transport, particularly in relation to the linking of magistral and railway routes, and the increasing of railway transit through Yugoslavia and Yugoslav ports. Also, Austria's possible participation in financing the construction of the highway through Yugoslavia was discussed. The two countries' interest in the signing, as soon as possible, of the document on joint construction of the Karavanken tunnel for road traffic was stated. The document was initialed in March this year. The question of Austrian authorities [?permit] for the operation of TV and ultra shortwaves which would enable members of Yugoslav national minorities in Austria to receive the RTV Ljubljana programs was discussed. Representatives of the two countries' radio and TV managements will shortly start on coordinating stands regarding technological problem. [Text] [Belgrade TANJUG in English 1740 GMT 8 Jun 77 LD]

YUGOSLAV-IRAQI COOPERATION--A delegation of Yugoslav businessmen has had talks in Baghdad with representatives of the Iraqi minister of communications on cooperation between the two countries in the field of river navigation. The final document which was signed on 23 May by Stevan Bek, vice president of the Vojvodina Executive Council and by Minhbedin Kemal, deputy minister of transportation, stressed the readiness of the two countries to expand cooperation in this field, and primarily on improving the course of the Tigris River. The Yugoslav side will prepare a plan of overall organization of river navigation in Iraq. It is also expected that Iraq will order new river ships in Yugoslavia. [Belgrade POLITIKA in Serbo-Croatian 30 May 77 p 2 AU]

CSO: 5500

INTER-ASIAN AFFAIRS

ASEAN EXPERTS AGREE TO POSSIBLE USE OF PALAPA SATELLITE

Jakarta ANTARA in English 0742 GMT 8 Jun 77 BK

[Text] Bandung, 8 Jun (ANTARA)--Telecommunications experts of the ASEAN member countries have agreed in principle to the possibility of using the Palapa satellite for intraregional or border communications, it was learnt here.

The agreement was the result of a study club on telecommunications held here from 3-6 June attended by 12 participants of the ASEAN member countries and led by Dr Theo Suryawan from Indonesia.

On the border communication, the participants agreed to regulate terminal traffic between the two adjacent countries [not further identified].

According to a press release, the meeting was held to discuss cooperation on telecommunications agreed at the first ASEAN telecommunications meeting held in Jogjakarta last April.

Dr Theo Suryawan told ANTARA after attending the meeting that Indonesia had offered Palapa to the ASEAN member countries with a tariff 20 percent below that of the Intelsat satellite, with the promise that in the long term, Indonesia could make it even cheaper.

Indonesia has also given the last specification of Palapa to be studied and adapted to their needs.

The Philippines, Thailand, Singapore and Malaysia have not stated their agreement to hire Palapa, but they are considering it.

According to Theo Suryawan, the meeting took an important decision on the use of Palapa for noncommercial activities, including exchange of visas [as received], sports and arts television programs, through the satellite. But all ASEAN countries except Indonesia face problems on the status of television services. There are state owned and private television services in most ASEAN countries.

The Telecommunication Public Corporation, Suryawan said, has prepared its transmission for the Indonesian Television Service's (TVRI) programs, but TVRI itself has not used it.

The delegates of the Philippines, Thailand, Singapore and Malaysia told ANTARA that telecommunications equipment in their countries could use Palapa, which is inexpensive to hire, but they must build ground stations, which are very expensive.

The participants visited Jatiluhur and Soreang ground stations after attending the meeting.

CSO: 5500

INTER-ASIAN AFFAIRS

BRIEFS

PRC ORDERS COLOR TV CAMERAS--Tokyo, 7 Jun KYODO--A group of two Japanese companies has received a yen 50 million order for two portable color television cameras from the China National Machinery Import and Export Corporation. The cameras, dubbed plus-color Handy Lookie system HL-33" [as received] will be delivered to the Peking television station by next January, according to the firms--Kanematsu-Gosho Ltd. and Ikegami Tsushinki Co., the developer of the camera. The companies said China is expected to step up imports of color TV broadcasting equipment from Japan in the future as the government under Chairman Hua Kuo-feng attaches importance to color TV broadcasting as a communication medium. [Text] [Tokyo KYODO in English 0838 GMT 7 Jun 77 OW]

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INDONESIA

BRIEFS

BROADCAST IN JAPANESE--Jakarta, 1 Jun (AFP)--Radio Jakarta will start a 1-hour daily broadcast in Japanese today starting at 1900 hours (1200 GMT). The Japanese language transmission, directed to listeners in Japan, can be heard at 25.5 and 30.38 meterband. A Radio Jakarta spokesman said with the latest foreign language broadcast addition, Radio Jakarta now transmits daily programs in English, French, Chinese, Arabian and Malay, beside the general Indonesian language programs. Director general for radio and television, Sumadi, hoped that the new Japanese language broadcast will further strengthen bilateral relations between Indonesia and Japan. [Text] [Hong Kong AFP in English 1112 GMT 1 Jun 77 OW]

EAST TIMOR TELECOMMUNICATIONS--The development of the telecommunications network in East Timor will be carried out in stages under central government aid with the cooperation of the telecommunications corporation on the same level as in other regions of Indonesia, the head of the telephone office in Dili said. He called on the government to provide East Timor with telephone facilities and operators to replace the old Portuguese telecommunications system. [Jakarta Domestic Service in Indonesian 1500 GMT 28 May 77 BK]

ASEAN REGIONAL SATELLITE--Jakarta, 2 Jun (ANTARA)--The use of the communications satellite "Pala" as an ASEAN regional communication satellite will be discussed in Bandung between next 3 and 6 June. This is a follow-up of the meeting of the subcommittee on ASEAN post and telecommunications held in Yogyakarta on April last. The Bandung meeting will also take up the problems of communications at the border regions. The Indonesian delegation will be led by the director general of Perumtel, Willy Munandir. [Excerpt] [Jakarta ANTARA in English 0707 GMT 2 Jun 77 BK]

METEOROLOGICAL WORK--Jakarta, 2 Jun (ANTARA)--Indonesia is expected to be able to improve its weather forecast soon with meteorological data transmitted by a weather satellite. J. Salatur, director of the National Aeronautic and Space Institute, said here Tuesday that signals from the Japanese made "geostationary meteorological satellite" will be monitored by Indonesia's earth satellite stations at Jakarta and Biak, Irian Jaya, every 15 minutes. Photos of cloud formations and other meteorological

phenomena of the earth can be received clearly due to the automatic pictures transmission system of the satellite, Salatun said. Salatun said meteorological data from the weather satellite are of great importance for agriculture, communications, tourism and preservation of environment. Indonesia is the second country in Asia after India capable of monitoring signals from weather satellites with domestically made instruments, Salatun said. [Text] [Jakarta ANTARA in English 0720 GMT 2 Jun 77 BK]

MICROWAVE NETWORK--Ujungpandang, 26 May (ANTARA)--The East Indonesian microwave network is expected to be in operation by the end of this year, according to R. Srihadi, head of the seventh telecommunication area. He told ANTARA Tuesday that the network will be the third in Indonesia's microwave system, after the trans-Sumatra network linking Medan and Jakarta, and the Java-Bali section linking Jakarta with Denpasar. The East Indonesian section will connect Denpasar with Ujungpandang. Srihadi said that work was now in progress on 14 relay stations, including five in the seventh area (on Tana Jampea Island, at Bontotino, Bontosari Tene, Bantaeng and Ujungpandang). He added that the microwave system stood apart from the "Palapa" domestic satellite communication system now already in operation, and constituted a multi-axes system of communication, many axes being required to prevent a disruption of communication. [Text] [Jakarta ANTARA in English 0733 GMT 28 May 77 BK]

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INTERNATIONAL AFFAIRS

BRIEFS

POLISH BROADCASTING COOPERATION WITH ROMANIA--A delegation representing Romanian Radio and Television led by Gheorghe Atanasiu, deputy director general, is visiting Poland at the invitation of Polish Radio and Television. Jan Mietkowaki, deputy chairman of the Committee for Radio and Television Affairs, and Gheorghe Atanasiu signed a working protocol today on cooperation in radio and television for the 1977-78 period providing for the further expansion of mutual information about the two countries, as well as for a program and personnel exchange. [Warsaw Domestic Service in Polish 2000 GMT 7 Jun 77 LD]

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YUGOSLAVIA

BRIEFS

OSIJEK TV CENTER--Work on constructing a television center, which will be equipped with most modern technology and which will make linkups with programs of Zagreb television and other Yugoslav television networks **possible**, began in Osijek on 27 May. The new center will cost 23 million dinars to construct. [Belgrade BORBA in Serbo-Croatian 28 May 77 p 6 AU]

ZAGREB-TRIESTE PHONE LINK--A direct telephone link between Zagreb and Trieste was established on 24 May. This link will be maintained via 24 channels and will be particularly useful for work organizations and business partners of the two cities. [Belgrade BORBA in Serbo-Croatian 30 May 77 p 14 AU]

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INTER-AMERICAN AFFAIRS

BRIEFS

PERU-BRAZIL RADIO LINE--Iquitos, Peru, 6 Jun--At the first meeting of the Mixed Peruvian-Brazilian Subcommission held in Iquitos yesterday, it was decided to set up a radio link between Iquitos and Manaus, Brazil. [Madrid EFE in Spanish 1259 GMT 6 Jun 77 PA]

CSO: 5500

CUBA

MICROWAVE TOWER INSTALLATION COMPLETED

Havana GRANMA in Spanish 4 May 77 p 4

[Article by Maria Caridad Prado]

[Text] In order to provide better service with regard to color television signals, radio broadcasting systems and long distance telephone calls, a microwave tower was recently built at the Ministry of Communications. It is a part of the microwave chain which will extend from Pinar del Rio to Guantanamo.

The installation work, done by 18 comrades of the 5th Construction and Installation Brigade, was begun last 21 April and was completed in salute to International Workers Day.

The plans for the tower were drafted by the design and structure group of the construction and installation enterprise, and it was built in the Camilo Cienfuegos Structures Workshop, working in coordination with the galvanizing plant of the communications workshops enterprise.

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CSO: 3010

INTER-ARAB AFFAIRS

ARAB COMMUNICATIONS SATELLITE TO BEGIN OPERATIONS IN 30 MONTHS

Amman AL-RA'Y in Arabic 3 May 77 p 9

[Article by Mamduh Hawamidah: "Why the Arab Satellite and What will It Accomplish for Jordan?"]

[Text] There are dozens of questions in people's minds these days about artificial satellites. What is the secret behind the very clear and high quality telephone communications over satellites while there are difficulties with communications passing over ground networks? Why are departments of radio and landline communications throughout the Arab homeland investing millions of dollars in satellite communications, rather than investing these millions in improving and developing ground communications networks? Then, what comprises the artificial satellite and then what is the relationship between the Arab satellite project and the Jordanian satellite station?

A Long Dialogue

These are some of the questions about satellites which I took to Eng Muhammad Shahid Isma'il, director general of Radio and Landline Communications Authority. A dialogue ensued at his office for more than 2 hours.



[Muhammad Shahid Isma'il]

[Question] People have more than one question about satellites. As deputy chairman of the board of directors of the Arab Space Communications Authority and director general of the Radio and Landline Communications Authority, I think that you are in a better position to discuss this than many.

Communication Problems

[Answer] Go ahead.

[Question] It's noticeable that telephone communications over satellites are extremely clear while those over ground networks run into problems and are never clear.

[Answer] To a certain extent, that's true, but I disagree with you in one part of your question.

[Question] What's that?

[Answer] Communications over ground networks may run into problems and do at times, but not always as you stated in your question.

Technological Development

[Question] Why is that?

[Answer] Radio and landline communications engineering has certainly benefited greatly from the advance and evolution of space technology. That scientific competition and the tremendous advance among the industrially advanced countries in reaching the moon and space had amazingly positive consequences, perhaps greater at present than the direct and currently anticipated results of the race to reach the moon and the nearby planets of the solar system. I mean by this the scientific and technological gains which resulted from the concentration by the industrially advanced countries of all their scientific and technological capabilities in the course of that race into space.

Purposes of Control

He was silent for a moment and then went on:

Because radio communications with satellites and the missiles that carry them into orbit is the only means for guidance, monitoring and recording natural phenomena and how well the equipment in the space vehicle is functioning and because communication with the astronauts and learning what they encounter during their flights and many other services cannot be carried on successfully unless there is guaranteed and reliable radio communications between the ground station and the space vehicle--all this prompted scientists and researchers in the competing countries to vie in concentrating their efforts to develop and improve radio communications in a manner unprecedented in human history until they emerged with radio communications systems which were extremely precise, capable and stable.

In the Arab Homeland

[Question] However, it is something else which occurs to the Arab citizen. Why are Arab radio and landline communication administrations investing millions of dollars in the field of space communications, rather than investing these millions in improving and developing ground telephone communication networks?

[Answer] That is a candid question which I appreciate, and I will also reply candidly. Similar questions have popped up everywhere throughout the world when the big powers allocated huge sums of money and mobilized their entire specialized manpower resources in winning the scientific and technological race to reach the moon and get into space. This made many people ask the same question when they saw the astronomical amounts of dollars which were being spent on this competition and a similar question emerges: Would it not be better to spend these huge amounts on fixed and specific projects for development, for example?

Tremendous Focus

I--Eng Isma'il speaking--don't intend at this point to make an extensive reply about the direct and indirect benefits which mankind reaps from such a tremendous focus of expenditures, scientific research and technological development, as this would require a separate discussion, but I will quickly move to respond to your candid question.

The basic objective of the Arab satellite has not only been to provide telephone and telex communications and the other traditional communications services, rather there is another goal which is of prime importance for the greater Arab homeland. This objective is the use of special satellite channels with broad coverage within the channels of the Arab satellite to carry unified television programs aimed at spreading education, culture, science, national awareness and health awareness by means of well thought out programs prepared by Arab experts from the Arab federation of broadcasting in conformity with the decisions of the Arab ministers of information and culture adopted in all their conference.

Why Via the Satellite?

[Question] Why via the satellite? Aren't there other ways to achieve this goal?

[Answer] The question has come up and the answer is simple, namely, that the broad radiation from the Arab satellite would cover the entire Arab homeland. Consequently, any school, small housing development or even the tents of a tribe in the desert and remote areas which cannot be reached by ground networks can receive television and radio programs via the Arab satellite using a simple antenna not more than 3 meters long which can be made locally and installed on the roofs of schools or homes or right on the ground. In this advanced way, knowledge can be disseminated throughout

every part of the Arab homeland. In the same way, the Arab countries with large geographic areas, such as Saudi Arabia, the Arab Republic of Egypt, Sudan and Algeria can lease a television channel on it to broadcast their programs within their territory and to every part of it via the Arab satellite at a cost lower than broadcasting over the traditional ground networks and stations.

The First Regional Group

He goes on to say:

I would like to add that the group of Arab countries is the first regional group in the world aimed at exploiting space technology to make knowledge and culture general, particularly to the poor, varied and remote segments of the population of the far-flung Arab homeland.

A Program in Four Languages

There is another thing that ought to be mentioned, namely, the fact that one cultural television program can be broadcast over the Arab satellite in four languages or dialects simultaneously.

The Economic Aspect

[Question] Has the economic usefulness of the project been taken into consideration?

[Answer] In order for this project to become economically useful, the Arab Federation of Radio and Landline Communications, in conjunction with the communications department of the Arab League, adopted the idea of using the Arab satellite to provide routine communications services, such as telephone, telegraph and telex services and the transmittal of information. Studies have shown clearly the economic viability of the project. If we recognize that at least half the capacity of the satellite will be earmarked for telephone and telex communications, this means, if one satellite is launched, the creation of no less than 3,000 telephone channels directly linking Arab capitals with one another with no need to go through any foreign quarter. If we recognize that one telephone channel, for example, can handle 24 telex channels, we get an idea of how much hoped for benefit there will be.

Triumph for the Arab Family

The director general of the communications authority continues:

Add to all this the fact that achievement of this goal is in itself a triumph for the Arab family since creation of a traditional ground network linking all the capitals of the Arab League countries to provide such direct and guaranteed communications would be difficult to achieve and exorbitantly expensive, besides requiring a great deal of time and effort.

[Question] I have read that efforts are now being exerted to plan for a supplementary ground telephone network in the Arab homeland. How much truth is there to this?

[Answer] That's true, but I think that the Arab satellite project can beat these efforts and achieve rapid, guaranteed, direct and reliable communications for the Arab family so that the Arab satellite project can be a major support for the proposed Arab ground network, particularly since Arab communications are today an important and primary support for the basic structure of economic solidarity for the desired Arab network project.

For Vast Distances

In brief, the Arab satellite project, says Eng Muhammad Shahid Isma'il, is designed to cross the vast distances of the various parts of the greater Arab homeland before they are linked by traditional ground networks, and it is a social, pan-Arab and economic necessity. At the same time, the Arab administrations are now developing their ground networks with noticeable rapidity.

Makeup of the Satellite

[Question] What is the makeup of the satellite and how are communications carried on through it?

[Answer] The satellite is in itself nothing more than a self-contained radio sending and receiving station hovering in space in a fixed orbit around the equator about 36,000 kilometers above the surface of the earth, revolving at the same speed as the earth. Accordingly, it is possible to control the radiation of the satellite, that is, minute radio waves known for practical purposes as microwaves, toward a specific area of the earth in a constant and profuse manner. This flying station draws the electric power needed to operate the transmission and receiving equipment from solar batteries which are installed on it and which convert solar power to electric power. Since the satellite is operating at this great altitude, the radio waves--microwaves--are transmitted directly from any point in the Arab homeland to the satellite and are received at the same instant at the other point with which communications are required within the area covered by the radio emanating from the satellite, crossing vast distances across the Arab homeland as a whole and, as I said, achieving rapid, reliable and guaranteed communications.

[Question] How much will weather conditions affect communications via satellite?

[Answer] Satellite communications are not affected by topography or by weather conditions, however severe.

Where Does the Project Stand?

[Question] How far have steps gone for setting up the Arab satellite?

[Answer] In the recent meeting of the board of directors of the Arab Space Communications Authority in Riyadh, it prepared a list of stipulations and specifications to focus the necessary consultative expertise on the Arab satellite project. Bids lists will be available for distribution at the authority's permanent headquarters in Riyadh at the beginning of next May.

[Question] And the cost?

[Answer] The necessary capital for the project was initially estimated at 100 million dollars but it is expected to exceed that.

[Question] Have all the Arab countries taken part in the project?

[Answer] There are 14 Arab countries participating so far and a total of about 93 percent of the capital has been covered.

[Question] What about the other countries?

[Answer] We hope that the other Arab countries will assist in this vital and important project shortly.

In 30 months

[Question] When will the Arab satellite actually go into service?

[Answer] In about 30 months, God willing.

[Question] From when?

[Answer] From March.

The Ground Station

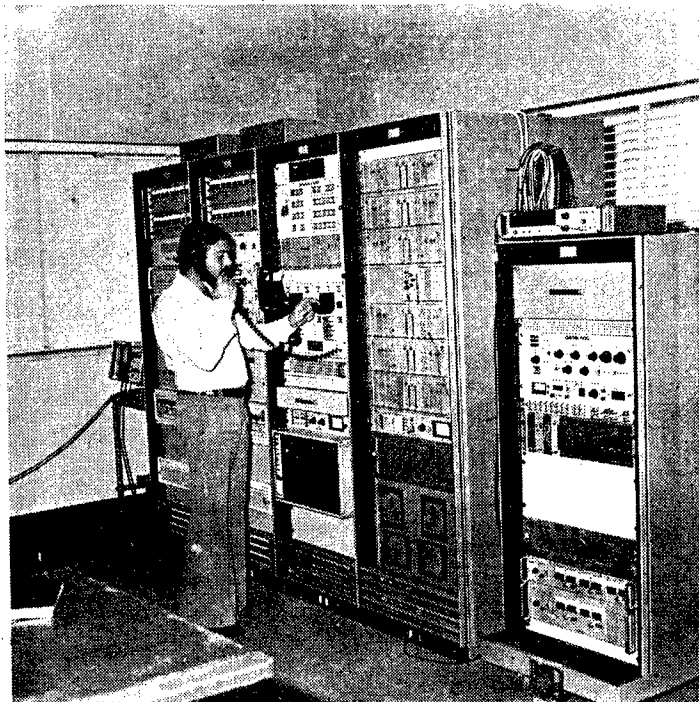
[Question] After all this, will there be a connection between the Arab satellite project and the Jordanian satellite station?

[Answer] No. The Jordanian station is designed to operate with the satellite over the Atlantic Ocean which belongs to the international satellite organization--Intelsat. Most Arab radio and landline communications authorities and departments are participating members in the capital of that international organization and work with it through ground stations similar to [our] ground station to provide international communications.

A Second Station

[Question] Is it true that it is intended to set up a second satellite ground station in Jordan?

[Answer] Yes. The Jordanian administration intends to construct a second ground station to work with the abovementioned organization's satellite over the Indian Ocean to provide direct communications between Jordan and the countries of the Near and Far East.



8389

CSO: 5500

EGYPT

PRIME MINISTER OPENS INTERNATIONAL TV NEWS CONFERENCE

Cairo MENA in Arabic 1026 GMT 2 Jun 77 NC

[Excerpts] Cairo, 2 Jun--Prime Minister Mamduh Salim has stressed Egypt's interest in the information media in view of the positive effect world public opinion has on decision-makers and of the people's love of and support for the principles of justice, liberation movements and respect for human rights.

In a speech he delivered this morning at the opening of the second International Television News Conference in Cairo, the prime minister expressed Egypt's increasing interest in this conference because it greatly affects the fateful questions in which the information media represents a main nerve, acquainting the world with what takes place in our country, and with the Egyptian man's struggle for freedom, development and prosperity.

Likewise, our knowledge of the people's news represents a basis for assuming our responsibilities regarding questions of our contemporary world.

He added that world public opinion, to the formulation of which television news contributes, has caused a decisive change in the language of international communication among people away from the familiar language of force, threat of force, agitation of racial ideological strife and regional interests.

Mamduh Salim referred to the importance of developing the exchange of television news to keep pace with the tremendous development in the cultural, political, economic and ideological spheres, and to the effects of the communications and technology revolution and their reflection on the need for news by individuals and peoples alike.

Mamduh Salim further said: On the basis of our faith in an indivisible world peace based on justice, we are interested in the flow of news as a means for acquaintance among peoples for the sake of peace. This also reflects on our national issues through the world's good understanding of their just aspects.

He added: As a part of the Third World, we are carrying out active development to rebuilt our country, which has been drained by the wars of liberation imposed on it. We believe that we live in one world where the exchange of news serves the world desire for joint efforts to achieve world prosperity, particularly in the fields of food, energy and raw material.

Referring to the Arab world's efforts to apply modern methods in television communication, he pointed out that the number of ground satellites has increased from 4 in 1974 to 17 in 1976.

CSO: 5500

LIBYA

BRIEFS

NEW RADIO STATION--A new radio station was opened in Darnah today with transmission power of 1061 kilocycles on a wave length of 283 meters. The new radio has begun regular transmission [words indistinct]. [Text] [Tripoli Domestic Service in Arabic 1730 GMT 9 Jun 77 JN]

CSO: 5500

INTER-AFRICAN AFFAIRS

GHANA 'GNA' OFFICIAL TELLS NIGERIAN VISITORS ABOUT UHF TRANSMITTER PLANS

Accra GNA in English 1604 GMT 8 Jun 77 LD

[Text] Accra, 8 Jun, GNA--The Ghana News Agency (GNA) is to install an ultra high frequency (UHF) transmitting system to enable its transmissions to be beamed simultaneously throughout the world, Mr Kow Bondzie Brown, general manager of GNA, announced today.

He was welcoming the three-member implementation task force of the Nigerian News Agency to the offices of the Tema branch of the agency, 18 miles or 28 kilometres east of here today.

Mr Brown said the installation of the transmitting system was part of a five-year modernisation plan approved by the Ghanaian Government for the agency.

He explained that land had been acquired for the construction of the transmission [as received] and work would start soon.

Mr Brown stressed that it was important for news agencies in the Third World to catch up and endeavour to make their presence felt throughout the world.

The Nigerian team led by Mr A. E. Howson-Wright, chairman of the task force, later inspected the offices of the state-owned Ghana Cargo Handling Company which was originally established by the Biney Cargo Handling Company in Lagos, Nigeria.

Later, the implementation team had a second round of official discussions with the management of the Ghana News Agency here behind closed doors.

Yesterday the team flew to Kumasi in central Ghana to inspect the regional offices of the GNA which links northern Ghana including the Brong Ahafo region with Accra, the capital of Ghana.

CSO: 5500

GHANA

GHANA OFFICIAL WOULD ESTABLISH ALL-AFRICAN NEWS AGENCY

Accra GNA in English 1210 GMT 6 Jun 77 LD

[Text] Accra, 6 Jun (GNA)--Colonel Parker Yarney, Ghana's commissioner for information, today reemphasised the need for countries in the West African sub-region to cooperate with each other for mutual benefits.

He observed that common services provided by the West African Court of Appeal, the West African Currency Board, and the West African Cocoa Research Institute at pre-independence tended to unite rather than divide the sub-region. But, he said, these institutions had to be broken up for nationalistic reasons.

Colonel Yarney was welcoming a three-man task force of the proposed Nigeria News Agency delegation to his office here. The delegation is on a 5-day visit to study the set-up and operations of the Ghana News Agency.

He noted with joy that through the aegis of the Economic Community of West African States (ECOWAS), a new economic and cultural organisation of West Africa, embracing both Anglophone and Francophone countries, had been established for the corporate development of the sub-region.

The commissioner stressed that the efforts being made to establish an all-African news agency was certainly in the right direction.

Colonel Yarney assured the delegation of the government's preparedness to place at its disposal the experience of Ghana over the past two decades in the news agency field. He said the comprehensive programme drawn for their stay would enable them to see the news agency set-up and also some parts of the country. The commissioner said the government was also prepared to offer training facilities to the personnel of the Nigeria News Agency on a mutually acceptable basis.

He expressed the belief that with the establishment of national news agencies by member-states of the (?OMVN) it would not be long when a reputable all-African news agency would emerge. He said the all-Africa news agency would be fed from all parts of the continent and thereby provide a reliable and authoritative source of information on African affairs.

The commissioner pointed out that the establishment of national news agencies would halt the over-dependence on foreign news media for information about the continent.

Colonel Yarney hoped it would not be long before there was an Accra-based correspondent of the Nigeria News Agency to reciprocate the posting of the CNA correspondent in Lagos.

The delegation is led by Mr A. E. Howson-Wright, chairman of the implementation task force. Other members are Mr Horatio Agadah, executive secretary and Mr J. S. Maemeke, member.

CSO: 5500

NIGERIA

BRIEFS

NIGERIAN TELEVISION--The Nigerian Television Authority has been inaugurated. The federal commissioner for information, Mr G. A. Ogunlade, who performed the inaugural ceremony, announced that plans were under way for a television production center in each state capital of the federation. Production centers would be constituted into zones, with a minimum of two sub-centers in a zone. Mr Ogunlade explained that the zonal programs would be broadcast for national reception through the means of airborne (?aerostat) transmitters. The aerostat stations, he added, were expected to begin to function progressively early next year. The existing [word indistinct], as well as those planned for the future, would be deployed as standbys for the airborne ones. [Text] [Lagos International Service in English 1530 GMT 2 Jun 77 LD]

CSO: 5500

FRANCE

BRIEFS

SIEMENS COMMUNICATIONS SYSTEM--The ATO-Chimie [Company] is being equipped with a "3000" communications system made and sold by the Siemens Company. With an initial capacity of 600 subscribers, this private automatic switch-board system brings to 20 the number of such systems installed in France. [Text] [Paris L'USINE NOUVELLE in French 2 Jun 77 p 44]

CSO: 5500

UNITED KINGDOM

BRIEFS

COMMUNICATIONS EQUIPMENT PURCHASE--The British firm Racal has just obtained a contract of 8.5 million pounds sterling (approximately 76 million French francs) for the sale of radiocommunications and auxiliary equipment to a Latin American country (which has not been identified). This contract, the largest ever received by Racal in that part of the world, enables it to make a market breakthrough in that region where there has been a sharp increase in radiocommunications. According to Racal, the agreement represents several years' work for it in that area. The technology of its equipment and the speed of its deliveries (a 15-week deadline will be long enough) were determining elements in Racal's securing this contract. [Text] [Paris ELECTRONIQUE ACTUALITES in French 20 May 77 p 7] 2662

CSO: 5500

WEST GERMANY

BRIEFS

TELEPHONE IMPROVEMENTS--Siemens Company will put into service in Munich in October 1977 the first EWS electronic telephone exchange ordered by the Bundespost [West German Postal and Telecommunications Service] after the satisfactory operation of three experimental telephone exchanges. This installation in Munich will be followed by three others, also built by Siemens, in Stuttgart, Frankfurt, and Dusseldorf. Additionally, the Bundespost plans to put into service in 1978 nine urban EWS telephone exchanges representing a total of 74,000 lines as well as an intercity telephone exchange. In 1979 the Bundespost will put into service telephone exchanges able to handle a total of 100,000 lines, a capacity to be doubled in the subsequent year. And in 1985 the electronic telephone exchange equipment delivered to the Bundespost will parallel the annual increase in the number of subscribers so that the existing EMD electromechanical telephone exchanges may be replaced by electronic telephone exchanges in the long run. [Text] [Paris ELECTRONIQUE ACTUALITES in French 20 May 77 p 7] 2662

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END